

# **IRRIGATION ARRANGEMENTS IN TRANSYLVANIA COUNTY, NORTH CAROLINA**

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IRRIGATION ARRANGEMENTS IN  
TRANSYLVANIA COUNTY, NORTH CAROLINA

A Report of an Irrigation Survey in Transylvania  
County, Conducted in the Summer of 1962

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Assisted by a grant from the  
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University of North Carolina  
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## Introduction

This is one of a group of reports of irrigation surveys made in the summer of 1962 covering eleven North Carolina counties. The surveys are part of a research project concerning arrangements by water users in selected areas of North Carolina to secure water sources. Conducting the surveys was James E. Martin, Jr., currently a second-year law student at the University of North Carolina, under the supervision of Milton S. Heath, Jr.\*

Briefly, the purpose of the irrigation surveys is to examine and analyze the following factors:

- .The nature and magnitude of farm irrigation in selected areas.
- .The types of crops irrigated.
- .The sources of water used.
- .The legal arrangements made by the irrigators to secure their sources of water, including purchase of land or water rights, agreements among irrigators and other water users concerning water use, permits required, etc.
- .Any disputes that may have arisen over sources of water affecting these irrigators, and the outcome of the disputes.

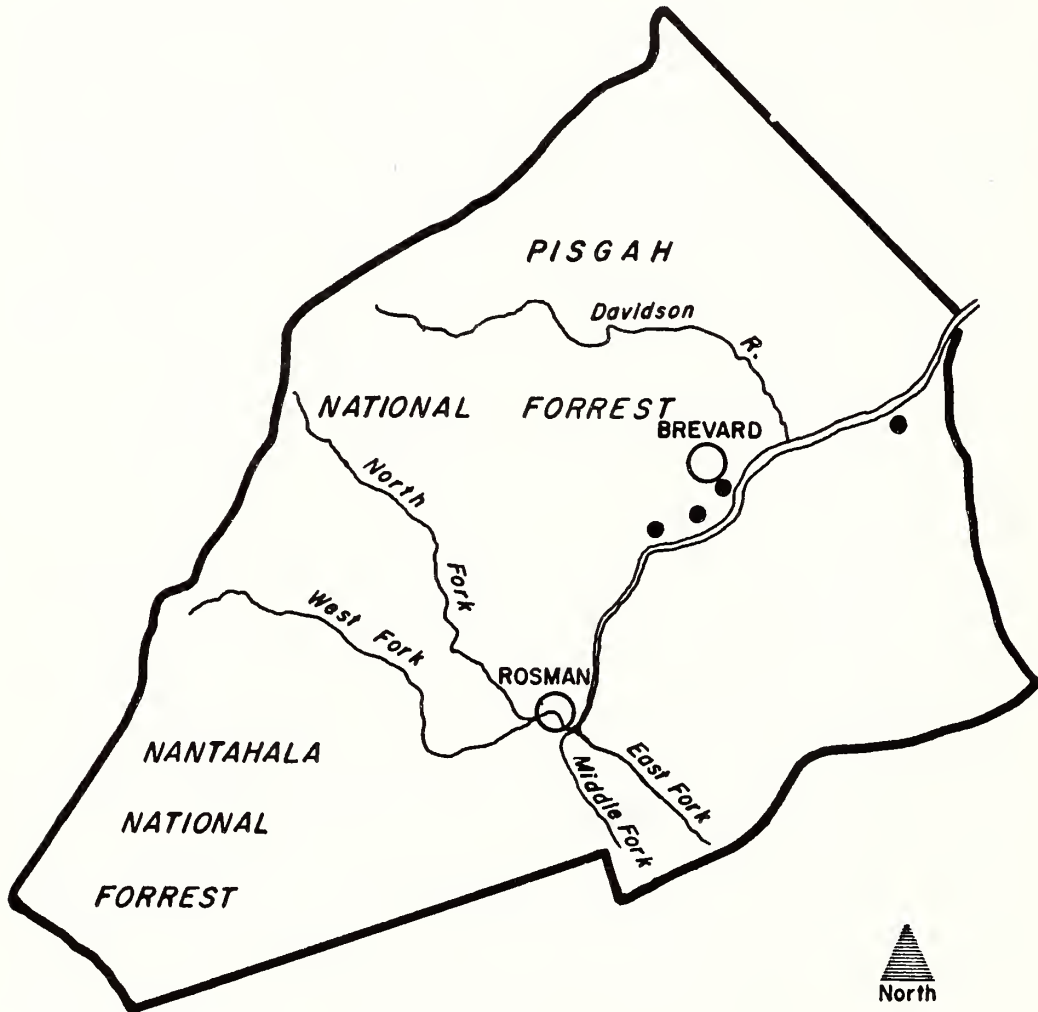
With this and other information developed through the research project, it is hoped that an accurate evaluation can be made of the operation of the existing structure of laws and political institutions affecting water use, of its weaknesses and strengths, and of its impact on water resource development.

The procedures followed in this survey are described in detail by Water Resource Paper No. 2. Briefly, the known irrigators were identified with the assistance of county agents and Soil Conservation Service personnel, and then were personally interviewed. A prepared questionnaire was used as a point of departure for the interviews.

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\*Water Resource Paper No. 1 contains a description of the over-all research project. Water Resource Paper No. 2 summarizes the 1962 irrigation surveys and reviews the procedures followed on the surveys.

# IRRIGATION IN TRANSYLVANIA COUNTY



**Key:**

- REPRESENTS AN ACTIVE IRRIGATOR WHO WAS CONTACTED IN THIS SURVEY DURING THE SUMMER OF 1962.





General Review of Irrigation  
in Transylvania County

Transylvania is a mountainous, lightly populated county blessed with an annual average rainfall of 57 inches. Much of the County lies within National Park or National Forest reservations.

Some of North Carolina's richest farmland is found in the valleys bordering Transylvania's rivers and streams. Principal crops include truck crops, flowers, tobacco and corn.

The limited farming area and high rainfall of Transylvania combine to restrict the need for reliance on irrigation. Only four active irrigators were definitely identified here, though there may be a few more Henderson County farmers who rent Transylvania farms and irrigate some crops there. All four of the known Transylvania irrigators derive their water from rivers or streams. One of the four is a gladiola grower with a 200-plus acre farm who irrigates on a large scale; roughly 50 acres of this are irrigated during dry spells from a 64-sprinkler system, a \$35,000 investment.

Summarized Results of Survey

1. Extent of coverage

Suggested list of irrigators (SCS Unit Conservationist)--6

Farms reporting irrigation in 1959 U. S. Census of Agriculture--2

Persons contacted--6

Active irrigators contacted--4

Estimated number of irrigators in Transylvania County (authors' estimate; assumes some Henderson County farmers renting Transylvania land engage in irrigation)--8

2. Time required for conduct of survey in Transylvania County

One-half day for interviewing irrigators and others

3. Water sources

Rivers or streams--4

4. Types of crops

Flowers (2 farms--50 and 20 acres)

Truck (1 farm--20 acres)



Tobacco (1 farm--1 acre, plus pasture)

The above figures reflect acreage irrigated, not necessarily the actual acreage of the farm.

5. Water usage

There are no reliable data available concerning the amount of water usage, and no mechanical measuring devices are in use.\*

6. Expansion

One of the four known irrigators expanded his system by adding pipe in 1962.

7. Disputes over water

None reported

8. Purchase of water rights or agreements concerning irrigation

None reported

9. Acquisition of riparian land, easements, etc.

None reported

Acknowledgments

SCS Unit Conservationist Grover C. MacPherson gave us invaluable help in identifying and locating irrigators. We are very grateful to him, and to State Conservationist Richard M. Dailey and Howard Ellis of the State College Department of Engineering Extension for their usual generous co-operation.

The map at page 3 was prepared by Charles Nakamura of the Institute of Government.

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\*See Water Resource Paper No. 2 for further comment.





